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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,048	12/06/2005	Tsuyoshi Masuda	Q89074	6247

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EXAMINER	
MESH, GENNADIY	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/542,048	MASUDA ET AL.	
	Examiner	Art Unit	
	Gennadiy Mesh	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *3,4,8,9 and 11-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-7 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/ are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/13/2005,08/31/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of The species as Fibers, having flat shape and obtain by process with catalyst of mixture (1) in the reply filed on 1/04/2008 is acknowledged. According Applicant Claims 1,2,5-7 and 10 are readable on this Species.

Claims 3-4,8-9 and 11-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1,2 5-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (JP 63-154204) cited by Applicant) in view of Yamamoto (US 6,593,447) and in further view of Kowallik et al.(4,254,018).

Regarding Claim 1 Nakamura discloses polyester yarn, having flat cross-sectional (modified) profile – see claims.

Nakamura does not disclose specific method for polymerization of the polyester nor specific catalyst claimed by Applicant in Claim 1.

However, Yamamoto teach, that polyester fiber(see lines 16-22,column 1) can be obtain from polyester produced by polycondensation process, wherein catalyst comprising reaction product of :

i) titanium compound - see formula (I) of abstract - this compound is substantially same as compound (IV) of Claim 1

ii) aromatic polyfunctional carboxylic acid – see formula (II) of abstract – this component same as component (II) of Claim 1

iii) phosphorus compound - see Formula (III) of abstract- this component same as component (V) of Claim 1.

Yamamoto further teach that this catalytic system allowed to obtain **polyester with good color tone and excellent melt stability** compare for example with polyester obtained by antimony comprising catalyst (see lines 46-61,column 1 and 50 – 57,column 2).

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to use polyester, obtain by process catalyzed by titanium compound as it taught by Yamamoto, for production of polyester fibers disclosed by Nakamura .

Note, that Yamamoto silent regarding use of alternative phosphorus compound (see Formula (III)) claimed by applicant in Claim 1.

However, use of this specific phosphorus compound (Formula (III) in Claim 1) for polyester polymerization and yarn production is well known in the art.

Kowallik teach(see abstract) that phosphonate compound of chemical Formula (III) can be used as heat stabilizing agent during polyester polymerization process and capable not only suppress discoloration, but also prevent **formation of coarse precipitates that can clog spinning dyes during fiber production.**

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to obtain polyester fiber disclosed by Nakamura in view of Yamamoto, wherein heat stabilizing compound is the specific compound (compound of Formula III in claim 1) taught by Kowallik in order prevent **formation of coarse precipitates that can clog spinning dyes during fiber production.**

Regarding limitations of Claim 2 - see Yamamoto, lines 50 – 53,column 6 and lines 29-39,column 5.

Regarding limitations of Claims 5 – see Yamamoto, lines 60-68,column 8 and column 9, lines 1-50.

Regarding limitations of Claim 7 – see Nakamura: claims and drawing (a and b) on page 4.

Regarding limitation of Claim 10 - see Nakamura drawing (c) on page 4.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2.1. Claims 1- 5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 7,087,299 (Konishi et al). Although the conflicting claims are not identical, they are not patentably distinct from each other, because they represent obvious variation of each other: Konishi discloses process for producing polyester fibers (see claims 1- 6) by same catalytic

system including same Titanium compound and same Phosphorous compound (see claim 1-6).

2.2. Claims 1-5 are directed to an invention not patentably distinct from claims 1-6 of commonly assigned U.S. Patent No. 7,087,299 – see paragraph 2.1. above.

2.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned instant Application and U.S. Patent No. 7,087,299, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

3.1. Claims 1- 5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 and 20-21 of U.S. Patent No.

7,189,797 in view of Nakamura in view of Yamamoto combine with Kowallik (see paragraph 1 above).

Although the conflicting claims are not identical, they are not patentably distinct from each other, because they represent obvious variation of each other.

Claims 1-8 and 20-21 of U.S. Patent No. 7,189,797 drawn to process of producing polyester with identical catalyst as it claimed by the Applicant in Claims 1- 5. Claims 1-8 and 20-21 of U.S. Patent No. 7,189,797 are silent regarding use of the polyester for fibers structures.

However, as it was discussed above Nakamura in view of Yamamoto combine with Kowallik teach that this specific polyester can be used for production of fiber with modified cross-sections.

Therefore, it would have been obvious for ordinary skill in the art at the time of the invention to modify claims of U.S. Patent No. 7,189,797 and claimed use of polyester obtained by specific catalyst for fiber having modified cross-sections as it was taught by Nakamura in view of Yamamoto combine with Kowallik.

3.2. Claims 1-5 are directed to an invention not patentably distinct from claims 1-8 and 20-21 of commonly assigned U.S. Patent No. 7,189,797 as it shown in paragraph 3.1. above.

3.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned instant Application and U.S. Patent No. 7,189,797

discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

4.1. Claims 1- 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/541,574: claims of both Applications significantly overlapping in scope as claimed subject matter drawn to polyester fibers, obtain by the same polymerization process with same catalytic system in both Applications.

This is a provisional obviousness-type double patenting rejection.

4.2. Claim 1-5 are directed to an invention not patentably distinct from claims 1-20 of commonly assigned Application No. 10/541,574 as it shown above – see paragraph 4.1.

4.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300).

Commonly assigned instant Application and Application No. 10/541,574, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

5.1. Claims 1- 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- 15 of copending Application No. 10/535,419: claims of both Applications significantly overlapping in scope as claimed subject matter drawn to polyester fibers, obtain by the same polymerization process with same catalytic system in both Applications.

This is a provisional obviousness-type double patenting rejection.

5.2. Claims 1- 5 directed to an invention not patentably distinct from claims 1- 15 of commonly assigned Application No. 10/535,419 as it was shown above – see paragraph 5.1.

5.3. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300).

Commonly assigned instant Application and Application No. 10/535,419, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272 1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gennadiy Mesh
Examiner
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GM

/Vasu Jagannathan/
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